

What is claimed is:

1. An information recording apparatus, comprising:

a first portable electric power source;

a first detector circuit for detecting remaining capacity
5 of said first electric power source;

an external power source terminal of a second electric power
source, being connected to an outside;

a second detector circuit for detecting that the second
electric power source is supplied to said external power source
10 terminal;

a recording circuit for recording information on a removable
recording medium; and

a finalizing process circuit for executing finalizing
process for said recording medium, wherein

15 when either one of the remaining capacity of said first
electric power source and voltage of said second electric power
source is detected to be equal or higher than a predetermined value,
in said first detector circuit and said second detector circuit,
operation of finalizing process is started by said finalizing
20 process circuit upon said recording medium.

2. An information recording apparatus, comprising:

a first portable electric power source;

a first detector circuit for detecting remaining capacity
of said first electric power source;

25 an external power source terminal of a second electric power
source, being connected to an outside;

a second detector circuit for detecting that the second

electric power source is supplied to said external power source terminal;

a recording circuit for recording information on a removable recording medium; and

5 a finalizing process circuit for executing finalizing process for said recording medium, wherein

during finalizing process by said finalizing process circuit, when both of the remaining capacity of said first electric power source and voltage of said second electric power source are
10 detected to be equal or lower than respective predetermined values thereof, in said first detector circuit and said second detector circuit, operation of the finalizing process by said finalizing process circuit is stopped upon said recording medium.

3. An information recording apparatus, comprising:

15 a recording circuit for recording information on a removable recording medium; and

a finalizing process circuit for recording lead-out data at least up to a predetermined recording region as finalizing process upon said recording medium, wherein

20 upon reproduction of said recording medium, if recording of the lead-out data of the finalizing process is started and is not completed up to the predetermined recording region, the lead-out data is newly recorded up to the predetermined region following the lead-out data recorded.

25 4. An information recording apparatus, comprising:

a lens unit for condensing optical signals;

an image pickup circuit for obtaining electric signals from the optical signals obtained through said lens unit;

an operation input circuit for changing picture information

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region obtained through said image pickup circuit by operating said lens unit;

a recording circuit for recording video information from said image pickup circuit on a removable recording medium; and

5 a finalizing process circuit for conducting finalizing process upon said recording medium, wherein

during time-period of the finalizing process, no input is accepted to said operation input circuit.

5. An information recording apparatus, comprising:

10 an image pickup circuit for converting optical signals into electric signals;

a digital compression converter circuit for converting an output from said image pickup circuit into a digital signal compressed;

15 an exchanger circuit for exchanging at least one of electric power consumptions in said image pickup circuit and said digital compression converter circuit;

a recording circuit for recording video information from said image pickup circuit onto said removable recording medium;

20 a finalizing process circuit for conducting finalizing process upon said recording medium, wherein

during time-period of the finalizing process by said finalizing process circuit, at least either one of electric power consumptions of said image pickup circuit and said digital
25 compression converter circuit is reduced, at least by said exchanger circuit.

6. An information recording apparatus, comprising:

a portable electric power source;

a first display circuit for displaying a result detected by said detector circuit;

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a second display circuit for displaying a time necessary for the finalizing process by said finalizing process circuit.

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a recording circuit for recording information on a removable recording medium;

a finalizing process circuit for conducting finalizing process on said recording medium; and

under operation of said recording circuit, when substantially no recording area remains on said recording medium, whether said finalizing process should be conducted or not is displayed on said display circuit.

a image pickup circuit for converting optical signals into electric signals;

a recording circuit for recording video information from

said image pickup circuit on a removable recording medium; and

a finalizing process circuit for conducting finalizing process on said recording medium, wherein

upon recording operation from said image pickup circuit,
5 the recording operation of at least of lead-out data by said finalizing process circuit is made faster in recording speed than that onto said recording medium.

9. An information recording apparatus, comprising:

10 a recording circuit for recording information on a removable recording medium; and

a finalizing circuit for recording lead-out data at least up to a predetermined recording region as finalizing process for said recording medium, wherein

15 recording of said read-out data is conducted intermittently by a unit of a predetermined amount thereof.

10. An information recording apparatus, as described in any one of the claims 1 to 9, wherein the information recording apparatus is a portable-type recording apparatus integrated with camera in one body while said recording medium is a disc.

20 11. An information recording apparatus, as described in any one of the claims 1 to 9, wherein the information recording apparatus is a portable-type information processing apparatus while said recording medium is a disc.

25 12. An information recording method for finalizing process data of a recording medium, comprising the following steps:

a first step for detecting remaining capacity in a first portable electric power source;

a second step for detecting voltage of a second electric power source which is supplied at an external power source terminal;

a third step for conducting finalizing process on a recording medium; and

a fourth step for starting operation of said finalizing process upon said recording medium when at least either one of
5 the remaining capacity of said first electric power source and the voltage of said second electric power source is equal or greater than a predetermined value.

13. An information recording method of video data, comprising the following steps:

10 a first step for detecting remaining capacity in a first portable electric power source;

a second step for detecting voltage of a second electric power source which is supplied at an external power source terminal;

15 a third step for recording information on a removable recording medium;

a fourth step for conducting finalizing process on said recording medium; and

a fifth step for stopping operation of said finalizing process when both the remaining capacity of said first electric
20 power source and the voltage of said second electric power source are equal or less than respective predetermined values thereof, during the finalizing process.

14. A method of restoration process for finalizing process, comprising the following steps:

25 a first step for reproducing from a removable recording medium;

a second step for detecting an end position of lead-out data;

a third step for recording new lead-out data following said

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end position detected; and

a fourth step for ending the recording when recording position reaches to a predetermined position.

15 15. An information recording method, comprising the following steps:

a first step for condensing optical signals by using a lens unit;

a second step for converting the optical signals condensed into electric signals by an image pickup circuit;

10 a third step for changing an area of video information condensed to said image pickup circuit by operating said lens unit;

a fourth step for recording the electric signals onto said removable medium, as the video information; and

15 a fifth step for conducting finalizing process on said recording medium, and at same time bringing said lens unit not to accept an action of operation thereof.

16. An information recording method of digital signals, comprising the following steps:

20 a first step for converting optical signals into electric signals by an image pickup circuit;

a second step for converting said electric signals into digital signals being compressed in data thereof by a digital compression converter circuit;

25 a third step for recoding said digital signals onto said removable recording medium; and

a fourth step for conducting finalizing process on said recording medium, and at same time stopping at least one of the processes of said first step and said second step, thereby to reduce

electric power consumption.

17. An information recording method of video data, comprising the following steps:

5 a first step for detecting remaining capacity in a portable electric power source;

a second step for displaying result of said detection;

a third step for recording information on a removable recording medium;

10 a fourth step for conducting finalizing process, which changes necessary process amount depending upon region already recorded on said recording medium; and

a fifth step for displaying time necessary for said finalizing process.

15 18. An information recording method, comprising the following steps:

a first step for recording information on a removable recording medium;

a second step for detecting that substantially no recording area remains on said recording medium;

20 a third step for displaying whether the finalizing process on said recording medium should be conducted or not when no recording area remains on said recording medium substantially.

19. An information recording method, comprising the following steps:

25 a first step for converting optical signals into electric signals by an image pickup circuit;

a second step for recording said electric signals onto said removable recording medium; and

a third step for recording data in the finalizing process,
in which lead-out data is recorded at least up to a predetermined
region on said recording medium, at speed being substantially
higher than that in the recording operation of signals from said
5 image pickup circuit.

20. An information recording method, comprising the
following steps:

a first step for recoding information signals on a removable
recording medium; and

10 a second step for conducting finalizing process, in which
lead-out data are recorded at least up to a predetermined recording
region on said recording medium, intermittently, by a unit of a
predetermined amount thereof.

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